

REMARKS

Applicants have reviewed the Office Action of February 2, 2004, and note with appreciation the withdrawal of the anticipation rejection of claims 11 and 20 based on the Swan et al. patent. A Request for a One Month Extension of Time is submitted concurrently herewith, along with authorization to charge any fees due from Deposit Account 50-0568.

First attending to formal matters, adjustments are made to claims 1, 2, and 15 to address potential antecedent basis issues. Specifically, claims 1 and 15 are amended to make it clear that "the multi-component" fibers correspond to the previously mentioned "bi-component" fibers. Dependent claim 2 is amended to clarify that the referenced "fibers" are the "primary" fibers. No new matter is added.

Turning to the substantive matters, the continued anticipation rejection of claim 1 based on the Swan et al. patent is respectfully traversed. As presented, this claim reads on an acoustical insulation product for a vehicle comprising a blanket of fibers and a facing material adhered to a major surface of the blanket. The product includes a densified perimeter flange providing stiffness and capable of being held in place on the vehicle by an attachment system. The blanket of polymer fibers includes primary fibers and bi-component polymer binder fibers made of a principal polymer component and a binder polymer component having a softening point lower than the softening point of the principal component. *Having been heated to a*

*temperature insufficient to soften the principal component but sufficient to soften the binder component*, the bi-component polymer binder fibers and the primary fibers are bonded to themselves and to each other. The significant advantages of this product are discussed in the specification at page 6, line 19, bridging over to page 7, line 11.

In rejecting claim 1 as anticipated, the contention is made that:

SWAN et al. teaches the use of a binder fiber with a sheath-core structure having a core of crystalline polyethylene terephthalate surrounded by a sheath of an adhesive polymer formed from isophthalate and terephthalate esters. . . . It is well known that crystalline polymers have a higher melting point than adhesive components in a bicomponent fiber. By *having a difference in melting point* (or softening point) this type of bicomponent fibers [*sic* fiber] *can be used* as binder or bonding fibers, therefore the difference in softening point is inherent to the bicomponent binder fibers taught by SWAN et al.

(emphasis added). Even taking the foregoing as true for the sake of argument, it does not form a proper basis for an anticipation rejection here.

As emphasized in past correspondence, each and every limitation set forth in this claim must be found in a single prior art reference in order for an anticipation rejection to be proper. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913 (Fed. Cir. 1989). If this "strict identity" requirement is not met, then such a rejection is without merit and must be withdrawn. Moreover, "[a]ll words in a claim must be considered in judging the patentability of th[e] claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

Claim 1 by its own express terms requires bi-component polymer binder fibers made of a principal polymer component and a binder polymer component having a softening point lower than the softening point of the principal component. It further requires a product comprised of the recited bicomponent fibers *"having been heated to a temperature insufficient to soften the principal component but sufficient to soften the binder component."* The rejection completely overlooks this requirement of the claim (which is undoubtedly a proper structural limitation, as opposed to an intended use or process step). *See Hazani v. U.S. International Trade Commission* 44 USPQ2d 1358 Fed. Cir. 1997) (holding that a "chemically engraved" limitation in a claim describes the product more by its structure than by the process used to obtain it) (citing *In re Garnero*, 412 F.2d 276, 278-79, 162 USPQ 221, 223 (CCPA 1969) ("it seems to us that the recitation of the particles as 'interbonded one to another by interfusion between the surfaces of the perlite particles' is as capable of being construed as a structural limitation as 'intermixed,' 'ground in place,' 'press fitted,' 'etched,' and 'welded,' all of which at one time or another have been separately held capable of construction as structural, rather than process, limitations").

The Swan et al. patent is silent as to an end product having been heated to bond any bi-component polymer binder fibers and primary fibers to themselves and to each other without softening the principal component of the binder fibers (and, indeed, even suggests that no such heating occurs during "thermoforming" of the

product disclosed therein; see col. 6, ll. 47-50). Accordingly, it cannot possibly anticipate the invention of claim 1. The rejection of this claim is therefore improper and must be withdrawn.

The same logic applies to independent claim 15. This claim reads on a product with bi-component polymer binder fibers made of a principal polymer component and a binder polymer component having a softening point lower than the softening point of the principal component, with the binder component having been heated to a temperature that is insufficient to soften the principal component but sufficient to soften the binder component to bond the bi-component polymer binder fibers and the primary fibers to themselves and to each other. Since Swan et al. does not disclose such a product, the anticipation rejection is likewise improper and must be withdrawn.

As for the secondary references cited, neither the Carey, Jr. et al. nor Weinle et al. patents supply the necessary teaching missing from the Swan et al. patent that would render the inventions of claims 1 or 15 obvious. Specifically, the Carey, Jr. et al. patent merely explains that upon configuring the disclosed web:

[it] is heated sufficiently to effect interfiber bonding by the bonding fibers with the other bonding fibers and with structural fibers to stabilize the reconfigured web to form the nonwoven thermal insulating batt of the invention. The temperature of the oven in which the web is heated is preferably about 40E to 70E C. above the temperature at which the adhesive portion of the bondable fiber melts.

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(col. 6, ll. 55-62). No mention is made of the softening point of the bondable fiber, so this patent does not disclose a product with a bi-component polymer fibers including a "binder component having been heated to a temperature that is insufficient to soften the principal component but sufficient to soften the binder component."

Likewise, the secondary Weinle et al. patent mentions "bicomponent fibers having a relatively low melting polymer binder component and a higher melting polymer strength component," (col. 2, ll. 15-17), as well as heating a product "at a temperature and for a time sufficient to activate the potentially adhesive characteristics of the thermoplastic binder fibers" (col. 5, ll. 65-68 to col. 6, l. 1). Nothing is said, however, about a product corresponding to the one in claims 1 and 15 with bi-component fibers having been heated to a temperature insufficient to soften the principal component but sufficient to soften the binder component. Accordingly, it cannot supply the missing teaching necessary to render the inventions of claims 1 and 15 obvious, either.

In light of the foregoing, claims 1 and 15 patentably distinguish over the cited patents and should be allowed. It likewise follows that the dependent claims are in condition for allowance as well. Nevertheless, Applicants further wish to emphasize the independent patentability of the inventions of claims 11 and 20.

Specifically, claim 11 explicitly provides that the primary fibers of the blanket are polyethylene terephthalate fibers and that the bi-component binder fibers

include a core of polyethylene terephthalate and a sheath of polyethylene terephthalate. The Examiner concedes that the Swan et al. patent does not supply this teaching, but nevertheless cites to the secondary Weinle et al. patent as providing it, since it allegedly “teaches the use of bi-component fibers . . . wherein the core is formed of a relatively high melting polyethylene terephthalate polymer (PET) and the sheath comprises a PET co-polymer having a much lower melting temperature.” The alleged motivation for the combination is to “provid[e] an insulation material with a molded batt of fibers that remains highly deformable and resilient as disclosed by WEINLE et al. (Column 3, lines 56-58).”

As observed by the Court of Appeals for the Federal Circuit in *In re Lee*, 61 USPQ2d 1430 (Fed. Cir. 2002), an alleged motivation to combine two references must be based on “objective evidence.” In elucidating on what is required, the court stated that:

[t]he factual inquiry whether to combine references must be *thorough and searching*. . . . This precedent has been reinforced in myriad decisions, and cannot be dispensed with. . . . *The need for specificity pervades this authority*. See, e.g., *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) (“particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed”) . . . .

(emphasis added).

The stated goal of “providing an insulation material with a molded batt of fibers that remains highly deformable and resilient” is insufficient to explain why a skilled artisan would have selected the bi-component fibers of the Weinle et al.

patent for use in the arrangement disclosed in the Swan et al. patent. Indeed, no scintilla of objective evidence establishes that the alleged combination would even meet this goal, including when the fibers are heated as required in the corresponding independent claim (on which point both patents are silent). In the absence of evidence showing why a skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed, a *prima facie* case of obviousness is lacking with respect to these dependent claims.

Finally, new claims 21-24 are presented. Claims 21 and 23 require that the primary fibers in the claimed acoustical insulation product are substantially free of melt blown fibers. Dependent claims 22 and 24 further specify that the primary fibers of the corresponding independent claims are other than polypropylene.

The Swan et al. patent is concerned only with forming a blanket of melt blown polypropylene fibers. Thus, it cannot possibly anticipate these claims. Melt blown polypropylene as taught in the Swan et al. reference possesses no true structural strength. Further, it is a weak material with low bond strength between fibers. The material frays quickly and is simply not durable. Thus, while melt blown polypropylene's acoustical properties may be attractive for use in automotive liners, its other properties/characteristics leave much to be desired. Simply stated, melt blown polypropylene is not in any way equivalent to the primary fibers defined in new claims 21-24. Moreover, none of the secondary references cited supply the


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missing teaching that would lead a skilled artisan to modify what is taught in Swan et al. to arrive at the inventions of these new claims. Consequently, their allowance is believed to be in order.

In summary, none of the independent claims presently pending in this patent application are anticipated by the Swan et al. patent, nor are these claims directed to subject matter that is "obvious" in view of it and any of the other cited patents taken alone or in combination. Upon careful review and consideration of the foregoing remarks, it is believed the Examiner will agree with this proposition. Accordingly, the early issuance of a formal Notice of Allowance is earnestly solicited. If any fees are required pertaining to this response, the Examiner is authorized to debit Deposit Account No. 50-0568.

Respectfully submitted,

  
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